



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,207	06/22/2001	Jonathan Schmitt	00-72 68605 (6653.)	8393

7590

11/05/2003

LSI Logic Corporation  
Corporate Legal Department  
Intellectual Property Services Group  
1551 McCarthy Blvd., M/S D-106  
Milpitas, CA 95035

EXAMINER

NGUYEN, DANNY

ART UNIT PAPER NUMBER

2836

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/888,207

Applicant(s)

SCHMITT, JONATHAN

Examiner

Danny Nguyen

Art Unit

2836

AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

The corrected drawing is accepted.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Agan (USPN 5,669,684).

Regarding to claim 1, Agan discloses a method for power protection circuit comprises the steps of placing the level shifter (10) in a pre-selected state (the power is applied to VR and transistors 16 and 18 are non-conductive, see fig. 1, col. 3, lines 45-47) if the input voltage supply (Vc) is not powered on before an output voltage supply (VR) is powered on (the power is applied to VR and transistors 16 and 18 are non-conductive, see fig. 1, col. 3, lines 45-47), and releasing the level shifter from the pre-selected state to follow transitions of an input signal when the input voltage supply is powered on (see col. 3, lines 46-57 and col. 5, lines 24-27).

Regarding to claims 2 and 5, Agan discloses the step of connecting a common voltage rail to an output signal port (switch 20 grounds (common voltage) the output on line 24 (see fig. 1).

Regarding to claims 4 and 7, Agan discloses a power protection circuit comprises a latch (10, 30) coupled to an input supply ( $V_c$ ) and output supply (col. 3, lines 3-4), and a switch (20) connected to the latch (10, 30) to latch wherein the switch (20) has a first state for holding a level shifter (10) if the input voltage supply is not powered on before an output voltage supply is powered on (the power is applied to VR and transistors 16 and 18 are non-conductive, see fig. 1, col. 3, lines 45-47), and a second state for releasing the level shifter from the pre-selected state to follow transitions of an input signal when the input voltage supply is powered on (see col. 3, lines 46-57 and col. 5, lines 24-27).

Regarding claim 8, Agan discloses a switch (20) connected to a level shifter (10 and 30) between an output signal port (port B) of the level shifter (10 and 30) and the ground (common voltage rail), and a latch (10) is connected to the switch and drives the switch (20) to conduct when the input voltage ( $V_c$ ) is not powered. When output voltage is powered and to drive the switch to a non-conducting state if the input voltage and the output voltage are powered (The switch (20) goes to non-conducting state when there is power provided to the input whenever switch (16) is on).

Regarding claim 10, Agan discloses the latch (10) comprises a two-field effect transistor (32 and 34) connected in series between a third transistor (18) and common voltage (ground).

Regarding claims 3 and 6, Agan discloses the switch (20) presents high impedance (col. 3, lines 50-52) to the output port (port B).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agan in view of Annema et al (USPN 6,320,414). Agan discloses a switch (20), but Agan does not disclose the switch comprises two transistors connected in series. Annema et al disclose switch (T1 and T2) coupled in series. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a switch of Agan as a switch with two transistors connected in series in order to improve current capacity.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers

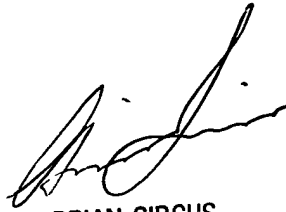
Art Unit: 2836

for the organization where this application or proceeding is assigned are (703)-872-9306 for regular communications and (703)-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

DN

DN  
November 3, 2003



BRIAN SIRCUS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800